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EXAMINER

HUYNH, SON P

ART UNIT PAPER NUMBER

2611

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/835,515

Applicant(s)

THOMAS ET AL.

Examiner

Son P. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 5-6 are objected to because of the following informalities:

In claim 5, line 6 and line 7, the phrase "said broadcaster unit" should be replaced as –a broadcaster unit. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11, 14-25, 28-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al. (US 6,459,427) in view of Eldering et al. (US 6,820,277).

Regarding claim 1, Mao discloses a system operable to output a packet multiplex including video packets and audio packets representing core television content (audio packets and video packets in core television content received by MPEG encoder 50 and transcoder 60 – figure 1) for which the system is principally licensed, the system

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including a mixing unit (70 and 80) to combine the core content (i.e., content receive via satellites 30,40) with non core content (i.e., content received from Internet via access server 100 – figure 1), the mixing unit including at least one of an IP to MPEG gateway (server 80 converts web content received from Internet to MPEG data – col. 5, lines 32-53) and a multiplexer (remultiplexer 70- figure 1, col. 5, lines 45-52),

a non-core content liaison unit comprising:

a content provider (CP) interface (i.e., Interface to Internet content provider such as advertisers, news provider, weather provider, etc. (col. 4, lines 35-50) to receive data to be inserted into the packet multiplex (figure 1, col. 4, lines 18-58; col. 5, lines 33-64);

Mao also discloses the MOREGATE broadcast server 80 interfaces with an Internet proxy server though Ethernet to retrieve Web content and output the web content to remultiplexer 70 as MPEG –2 transport stream (col. 5, lines 45-64).

Necessarily, the unit comprises a collection unit (i.e. Internet proxy server), responsive to the CP interface, to collect the non core content (web content) by at least one of actively retrieving and reactively the non-core content from a source (i.e., Internet) thereof identified in the specification; a transfer unit, response to the CP interface, to transfer the non-core content from the collection unit so that the desired web content is retrieved and provided to the remultiplexer for transmitting to the user. However, Mao does not specifically disclose insertion schedule and transfer the non-core content according to the insertion schedule.

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Eldering discloses receiving specification of non core content (e.g. ad bandwidth, ad duration, etc. – col. 2, lines 35-39; col. 5, lines 35-46) and insertion schedule (i.e., cue tones detected – col. 1, lines 38-60, or avail opportunities, such as duration, broadcast time, etc. is detected – col. 5, line 67-col. 6, line 41) and transfer the non core content (i.e., advertisements) according to the insertion schedule (col. 1, lines 40-45; col. 9, lines 38-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao to use the teaching as taught by Eldering in order to insert the data at predetermined time and furthermore managing the insertion process (col. 2, lines 19-39).

Regarding claim 2, Eldering further discloses the AMS includes an ability to capture particular ads and to store those ads for later display (col. 11, lines 20-49). Thus, the collection unit (i.e. AMS 100) includes memory into which the collection unit is operable to store the non-core content so as to decouple, in time, the collection and the transfer of the non-core content (advertisements). It would have been obvious to one of ordinary skill in the art to modify Mao and Eldering to use the teaching a further taught by Eldering in order to store data for future use, and furthermore, to quickly provide data upon request.

Regarding claim 3, Mao in view of Eldering discloses the liaison unit as discussed in the rejection of claim 1. Eldering further discloses the AMS receives advertisement characterization (i.e., ad bandwidth, ad duration, etc.) and insertion schedule (i.e.,

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broadcast date/time – col. 5, line 30-col. 6, line 13; col. 10, lines 51-55) of multiple advertisements from multiple advertisers (col. 5, lines 9-39; col. 8, lines 12-43). Thus, the claimed first content provider unit is met by one advertiser/ad source and the second content provider unit is met by the other advertiser/ad source, wherein the claimed CP interface, collection unit, transfer unit as claimed are analyzed as discussed in the rejection of claim 1. Therefore, it would have been obvious to one of ordinary skill in the art to modify Mao and Eldering to use the teaching as further taught by Eldering in order to optimize revenue (by auctions of the available bandwidth to different advertisers/ad sources).

Regarding claim 4, Mao further discloses each of the first machine readable form and the second machine readable form is compliant with a common protocol (e.g. DVB ASI format that carries MPEG – 2 transport stream-figure 1, col. 5, lines 1-64).

Regarding claim 5, Eldering further discloses the specification includes characterization type of the non-core content (e.g. ad bandwidth, duration, etc. – col. 2, lines 35-49).

Regarding claim 6, Eldering further discloses the advertisement is captured and stored at the AMS (col. 11, lines 20-46). Eldering also discloses initial broadcast time for inserting the advertisement (col. 6, lines 28-30). It would have been obvious to one of ordinary skill in the art that the transfer schedule includes a first set of at least one time for the advertisement to be collected (captured and stored) and a second set of at least

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one time for the advertisement to be transferred (retrieved from memory and transferred), the second set being different than the first set so that the advertisement can be tracked/updated and an accurate bill can be prepared for the advertiser.

Regarding claim 7, Eldering further discloses the insertion schedule comprises duration (D) of time slot (avail duration) or start time slot and end time slot for insertion (broadcast time for advertisement to be inserted) – see col. 6, lines 21-30.

Regarding claim 8, Eldering further discloses insertion schedule at exact time duration of the avail (e.g., 30s - col. 6, lines 20-21), and the interface of the advertiser/ad source receive the insertion schedule and transmit the advertisement as duration or broadcast time as scheduled (col. 5, lines 8-46). It would have been obvious to one of ordinary skill in the art that the insertion schedule is a microschedule (schedule for each ad); wherein the CP interface (advertiser/ad source interface) is operable to receive a macrochedule (avail time/duration) including at least one recurring time slot, each recurring slot having a microschedule (schedule for each ad), respectively; and wherein the transfer unit is responsive to the macroschedule (response to avail time/duration) to transfer the advertisements to maximize bandwidth utilization for the ads.

Regarding claim 9, Mao in view of Eldering discloses a liaison unit as discussed in the rejection of claim 7. Eldering further discloses when multiple ads are used with an avail, the ad with the highest correlation (and its corresponding price) is selected for

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placement in the avail (col. 8, lines 23-30) broadly reads on if two or more of the scheduling parameters are contradictory, then the liaison unit is operable to apply at least one conflict resolution rule to ignore at least one of the contradictory scheduling parameters in order to interpret the insertion schedule to be valid.

Regarding claim 10, Eldering further discloses ad duration (e.g., 10 s; 15s; etc. – col. 5, lines 35-37) and broadcast for duration (broadcast in avail duration of the ad, i.e. 15s, 20s, etc. – col. 5, line 67-col. 6, line 1; col. 6, lines 20-21).

Regarding claim 11, Eldering further discloses presenting the specification and the insertion schedule (ad broadcast time, ad duration, etc.) using a web (browser) interface (col. 5, lines 9-44). Eldering further discloses the AMS can be realized in a software means in a number of programming languages including but not limited to Java, C, and C++ (col. 10, lines 5-9). However, neither Mao nor Eldering specifically discloses XML document. Official Notice is taken that using XML document is well-known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to use the well-known teaching in the art in order to expand capabilities of the system.

Regarding claim 14, Mao in view of Eldering discloses a liaison unit as discussed in the rejection of claim 1. Eldering further discloses a billing module is used to handle the charges and the payments of the advertiser/ad sources (col. 9, lines 55-65). Eldering further discloses the advertisement comprises ad duration, minimum ad bandwidth, etc.



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(col. 5, lines 35-45). Necessarily, the specification and insertion schedule associated with an account (e.g. advertiser/ad source, available bandwidth, available duration); and the transfer unit is operable to limit the insertion schedule dictated transference of the non core content so as to comply with a bandwidth allocation for the account (avail bandwidth/duration for the avail ad for advertiser/ad source – col. 8, lines 2-42).

Regarding claim 15, Mao in view of Eldering teaches a liaison unit as discussed in the rejection of claim 14. Eldering further discloses the advertisement is transmitted in avail opportunities, such as duration, broadcast time, etc. (col. 5, line 63-col. 6, line 45).

Necessarily, the transfer unit limits the transference by processing the insertion schedule as a plurality of incremental time slices (figure 8), the bandwidth allocation (avail bandwidth) representing a maximum data amount of data that can be transferred in each time slice (col. 6, lines 15-30). Eldering also disclose multiple advertisements are used with an avail, the ad with highest correlation is selected for placement in the avail (col. 8, lines 23-55). It would have been obvious that if transference of the maximum amount of data takes place before the end of the time slice, then the transfer unit is operable to suspend the transference until a next time slice begins (next avail) in order to maximize bandwidth utilization, and furthermore, to optimize the revenue.

Regarding claim 16, the claim is broader in scope than claim 1, and are analyzed as discussed with respect to the rejection of claim 1.

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Regarding claim 17, Mao further discloses sources provided web content via WWW (figure 1) reads on source of non-core content.

Regarding claims 18-21, 23-25 the limitations as claimed correspond to the limitations as claimed in claims 3-8, 11, and are analyzed as discussed with respect to the rejection of claims 3-8, 11.

Regarding claim 22, Mao in view of Eldering discloses the non-core content provider unit as discussed in the rejection of claim 16. Eldering further discloses the content provider enters ad characterizations for first advertisement and ad characterization for second advertisement comprises bandwidth requires, duration, broadcast time, etc. (col. 5, lines 9-45; col. 8, lines 25-33). Thus, the ad characterization for first advertisement broadly reads on the claimed first machine-readable form, first specification (e.g. duration = 15s) and first insertion schedule (schedule for first advertisement) corresponding to a first account maintained for first advertisement, which being bounded by a first bandwidth allocation (i.e. bandwidth allocation/available for first advertisement) and ad characterizations of the second advertisement reads on second machine readable form, second specification of second non content (second advertisement) that is to be inserted into the packet multiplex (col. 9, lines 5-17) and a second insertion schedule by which the second non core content to be inserted into the packet multiplex (schedule for second ad to be inserted into the packet multiplex, the second specification and insertion schedule corresponding to a second account

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maintained by the content provider (second ad characterization such as broadcast time, bandwidth, etc. correspond to a second account maintained for second advertisement, the second account being bounded by a second bandwidth allocation different than the first bandwidth (for example, bandwidth for second ad is 4 Mb/s and bandwidth for first ad is 2 MB/s – col. 5, lines 30-47).

Regarding claim 28, Mao discloses a system operable to output a packet multiplex including video packets and audio packets representing core television content (audio packets and video packets in core television content received by MPEG encoder 50 and transcoder 60 – figure 1) for which the system is principally licensed, the system including a mixing unit (70 and 80) to combine the core content (i.e., content receive via satellites 30,40) with non core content (i.e., content received from Internet via access server 100 – figure 1), the mixing unit including at least one of an IP to MPEG gateway (server 80 converts web content received from Internet to MPEG data – col. 5, lines 32-53) and a multiplexer (remultiplexer 70- figure 1, col. 5, lines 45-52),

a non-core content liaison unit comprising:

a content provider (CP) interface (i.e., Interface to Internet content provider such as advertisers, news provider, weather provider, etc. (col. 4, lines 35-50) to receive data to be inserted into the packet multiplex (figure 1, col. 4, lines 18-58; col. 5, lines 33-64);

Mao also discloses the MOREGATE broadcast server 80 interfaces with an Internet proxy server though Ethernet and communicate with the content providers

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using World Wide Web (figure 1). However, Mao does not specifically disclose a request for bandwidth for insertion of the non-content, the request bandwidth including a bandwidth profile of bitrate versus time or equivalent thereto; a user interface by which to present the request to, and receive a decision concerning the request from, a user; the CP interface being able to communicate, in a second machine readable form to the content provider, a response to the request corresponding to the decision.

Eldering discloses content provider interface receives a request for bandwidth for insertion of the non-content (advertisers enters ad characterization using advertiser interface, e.g., a Web (browser) interface – col. 5, lines 9-16), the request bandwidth including a bandwidth profile of bitrate versus time or equivalent thereto (i.e., 2 Mb/s, 4 Mb/s, etc. – col. 5, lines 38-39); a user interface (advertiser interface, e.g., web browser interface – col. 5, lines 9-16) by which to present the request to, and receive a decision concerning the request from, a user (receiving acceptance notification to the requesting advertiser/ad source – col. 9, lines 4-6); the CP interface being able to communicate, in a second machine readable form to the content provider, a response to the request corresponding to the decision (transmit an acceptance notification to the advertiser/ad source, in response to the request for transmission of the advertisement. The advertiser/ad source then transmits the actual contents to the advertisement and the content is placed in suitable format and send to the ad insertion module for insertion into the program streams – col. 9, lines 4-13.). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time the invention was made to modify Mao to use the teaching as taught by Eldering in order to optimize the revenues (col. 8, lines 30-34) and furthermore, allow the service provider to easily control insertion of data into the stream.

Regarding claim 29, Eldering further discloses the insertion schedule for first advertisement (e.g. advertisement has bandwidth profile of 2 Mb/s – col. 5, lines 35-39; col. 8, lines 25-33) reads on the “first insertion schedule”. Eldering further discloses collection of avail data from network and other content related databases. The avail data may include specifics about the avail opportunities such as bandwidth avail, duration, etc. (col. 5, line 65-col. 6, line 14). The advertisement is selected to insert into the stream based on degree of correlation between avail opportunities in the stream and ad characterization (col. 8, lines 1-55). Inherently, the response is a counter-proposal for bandwidth including a second bandwidth profile (e.g. 6 Mb/s) different than the first bandwidth profile (i.e., 2 Mb/s) so that the avail bandwidth is detected and advertisement correspond to the avail bandwidth is selected to be inserted into the stream.

Regarding claim 30, Mao discloses a system operable to output a packet multiplex including video packets and audio packets representing core television content (audio packets and video packets in core television content received by MPEG encoder 50 and transcoder 60 – figure 1) for which the system is principally licensed, the system

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including a mixing unit (70 and 80) to combine the core content (i.e., content receive via satellites 30,40) with non core content (i.e., content received from Internet via access server 100 – figure 1), the mixing unit including at least one of an IP to MPEG gateway (server 80 converts web content received from Internet to MPEG data – col. 5, lines 32-53) and a multiplexer (remultiplexer 70- figure 1, col. 5, lines 45-52),

a non-core content liaison unit comprising:

a content provider (CP) interface (i.e., Interface to Internet content provider such as advertisers, news provider, weather provider, etc. (col. 4, lines 35-50) to receive data to be inserted into the packet multiplex (figure 1, col. 4, lines 18-58; col. 5, lines 33-64);

Mao also discloses the MOREGATE broadcast server 80 interfaces with an Internet proxy server though Ethernet and communicate with the content providers using World Wide Web (figure 1). However, Mao does not specifically disclose a bandwidth request generator to generate a request for bandwidth for insertion of the non-content, the request bandwidth including a bandwidth profile of bitrate versus time or equivalent thereto; an negotiation interface to the DTV system to provide, in a machine readable form, the bandwidth request

Eldering discloses bandwidth request generator to generate for bandwidth for insertion of the non content into the mixing unit (advertisers enters ad characterization using advertiser interface, e.g., a Web (browser) interface – col. 5, lines 9-16), the request

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bandwidth including a bandwidth profile of bitrate versus time or equivalent thereto (i.e., 2 Mb/s, 4 Mb/s, etc. – col. 5, lines 38-39); an negotiation interface to the DTV system to provide, in a machine readable form, the bandwidth request (i.e. opportunities modules/avail sales/auctioning module, advertiser interface, provides the bandwidth request/avail bandwidth – col. 6, lines 1-34; col. 8, line 12, col. 9, line 12 – figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao to use the teaching as taught by Eldering in order to optimize the revenues (col. 8, lines 30-34) and furthermore, allow the service provider to easily control insertion of data into the stream.

Regarding claim 31, Eldering further discloses a user interface (advertiser/ad source interface such as web browser interface– col. 5, lines 9-44) by which to receive at least one user criterion concerning a desired bandwidth allocation (i.e. minimum advertisement bandwidth – col. 5, lines 9-44);

wherein the bandwidth request generator is operable to generate the bandwidth request in response to the user interface (determined the avail bandwidth for the ad bandwidth – col. 8, lines 1-45; col. 9, lines 5-17).

Regarding claim 32, Eldering further discloses the negotiation interface is operating to receive, in a second machine readable form, a response to the request corresponding to the decision (i.e., auctioning module receives acceptance notification and transmit to the requesting advertiser/ad source- col. 9, lines 4-12).

Regarding claim 33, Mao discloses a system operable to output a packet multiplex including video packets and audio packets representing core television (television from satellite receiver 30,40– figure 1) for which the system is principally licensed, the system including a mixing unit to combine the core content with non-core content (web content), the mixing unit including at least one of an IP to MPEG gateway (server 80) and a multiplexer (remultiplexer 70), the data structure of the packet multiplex comprising: video packet and audio packets representing core television content (content from encoder 50 and transcoder 60 – figure 1, col. 5, lines 1-24); non core packet (web content packet) represent the non core content (Web content – figure 1; col. 5, lines 33-64); specification packet (e.g. HPAT, HPMT – col. 8, lines 30-53) representing a specification of the non core content. However, Mao does not specifically disclose an insertion schedule by which the non-core content is inserted into the packet multiplex.

Eldering discloses specification of non core content (e.g. ad bandwidth, ad duration, etc. – col. 2, lines 35-39; col. 5, lines 35-46) and an insertion schedule (i.e., cue tones detected – col. 1, lines 38-60, or avail opportunities, such as duration, broadcast time, etc. is detected – col. 5, line 67-col. 6, line 41) by which the non core content (i.e., advertisements) is inserted into the packet multiplex (col. 1, lines 40-45; col. 9, lines 38-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao to use the teaching as taught by Eldering in



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order to insert the data at predetermined time and furthermore managing the insertion process (col. 2, lines 19-39).

Regarding claim 34, the limitations as claimed correspond to the limitations as claimed in claim 33, and are analyzed as discussed with respect to the rejection of claim 33.

Mao further discloses outputting the enhanced packet multiplexed to a DTV content receiving unit (outputting the multiplexed packet to receiving side (150 – figure 1).

Regarding claims 35-36, the method and the computer readable medium, respectively, direct toward embody the system of claim 1, and are analyzed as discussed with respect to the rejection of claim 1.

Regarding claims 37-38, the method and the computer readable medium, respectively, direct toward embody the system of claim 16, and are analyzed as discussed with respect to the rejection of claim 16.

Regarding claims 39-40, the method and the computer readable medium, respectively, direct toward embody the system of claim 28, and are analyzed as discussed with respect to the rejection of claim 28.

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Regarding claims 41-42, the method and the computer readable medium, respectively, direct toward embody the system of claim 30, and are analyzed as discussed with respect to the rejection of claim 30.

Regarding claim 43, the method and the computer readable medium, respectively, direct toward embody the system of claim 34, and are analyzed as discussed with respect to the rejection of claim 34.

4. Claims 12-13 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al. (US 6,459,427) in view of Eldering et al. (US 6,820,277) as applied to claim 1, and further in view of Lewis (US 2005/0198667).

Regarding claim 12, Mao in view of Eldering teaches a liaison as discussed in the rejection of claim 1. Eldering further discloses the advertiser enters ad characteristic and be charged once the advertisement is transmitted (col. 5, lines 9-16; col. 9, lines 55-65). subscriber's name, address, etc. are used to target advertisements (col. 4, lines 46-56). Thus, the specification inherently includes an account so that the advertiser or subscriber can be charged and billed to payment. Eldering further discloses group of related items (category – col. 5, lines 14-16) and an independent item (advertisement – col. 9, lines 18-36), and the items (advertisements) are output by the mixing unit (col. 9, lines 6-17). However, neither Mao nor Eldering specifically discloses a catalog, and data structures are organized as:

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an account at the top of the hierarchy;  
each account including at least one catalog;  
each catalog including at least one of an independent item, and  
a group of related items; and  
each group including at least two of the following:  
a group of related items and an independent item.

Lewis discloses an account (e.g. virtual blockbuster, virtual music, etc. – figure 3A); a catalog (i.e. main menu, virtual blockbuster, etc.), a group of related items (i.e. MOVIES); and an independent item (i.e. title of the movie) – figures 3A-3B), a data structure organized as:

an account at the top of the hierarchy (e.g., main menu/virtual blockbuster, etc. displayed first – figure 3A)  
each account including at least one catalog (each menu/virtual blockbuster including at least one catalog such as Select movie From, Select Movie by, etc. – figures 3A-3B) ;  
each catalog including at least one of an independent item (a movie title – figure 3B),  
and a group of related items (i.e. movie from broadcast, new release, etc. – figure 3B);  
and each group including at least two of the following:  
a group of related items and an independent item (i.e., New release and movie title – figure 3B). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mao and Eldering to use the teaching as taught by Lewis in order to locate desired information easily.

Regarding claim 13, Lewis further discloses selection of Main Menu to locate Virtual Blockbuster, Virtual Music, etc. and selection of Virtual Blockbuster to locate MOVIE, etc (figures 3A-3B) broadly reads on the claimed feature of an attribute of a higher level data structure (i.e. Main menu, virtual blockbuster, etc.) in the hierarchy is inherited down to a corresponding data structure at a lower level (i.e., MOVIE, New Release, etc.) of the hierarchy by default unless a value of the attribute is separately specified at the lower level.

Regarding claims 26-27, the additional limitations as claimed correspond to the additional limitations as claimed in claims 12-13 respectively, and are analyzed as discussed with respect to the rejection of claims 12-13.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arazi et al. (US 5,966,120) discloses method and apparatus for combining and distributing data with pre-formatted real time video.

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Chen et al. (US 5,917,830) discloses splicing compressed packetized digital video streams.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPH

September 27, 2005



**CHRISTOPHER GRANT**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**